# Submission of the views of the Technology Executive Committee on long-term finance

1. The Technology Executive Committee (TEC) welcomes the opportunity to submit its views on long-term finance (LTF), taking into account the "Report on the workshops of the work programme on long-term finance", in accordance with decision 4/CP.18, paragraph 5.

### **Background information**

- 2. The Technology Mechanism, composed of the TEC and the Climate Technology Centre and Network (CTCN), was established by Parties at the sixteenth session of the Conference of the Parties (COP).<sup>2</sup>
- 3. Parties at COP 16 agreed on the priority areas for the development and transfer of technologies under the Convention.<sup>3</sup>
- 4. Parties at COP 17 decided that the costs associated with the Climate Technology Centre and the mobilization of the services of the Network should be funded from various sources.<sup>4</sup>
- 5. Parties at COP 18 agreed to further elaborate the linkages between the Technology Mechanism and the financial mechanism of the Convention.<sup>5</sup>
- 6. Parties at COP 18 decided to extend the work programme on LTF for one year to the end of 2013<sup>6</sup> and invited Parties and the thematic and expert bodies under the Convention to submit to the secretariat, by 21 March 2013, their views on the extended work programme.<sup>7</sup>
- 7. In their message, from 28 March 2013,<sup>8</sup> the co-chairs noted (in referring to the first event of the extended work programme on LTF held to gather views of Parties and stakeholders on the work programme) that they were particularly interested in:
  - (a) Expected outcomes of the extended work program on LTF in 2013;
  - (b) How to best focus and advance discussions on topics around pathways for mobilizing scaled up climate finance, enabling environments and policy frameworks;

<sup>2</sup> Decision 1/CP.16.

<sup>&</sup>lt;sup>1</sup> FCCC/CP/2012/3.

<sup>&</sup>lt;sup>3</sup> Decision 1/CP.16, paragraph 120.

<sup>&</sup>lt;sup>4</sup> Decision 2/CP.17, paragraph 139. In accordance with this decision, sources include the financial mechanism of the Convention, bilateral, multilateral and private sector channels, philanthropic sources as well as financial and in-kind contributions from the host organization and participants in the Network.

<sup>&</sup>lt;sup>5</sup> Taking into consideration the recommendations of the Board of the Green Climate Fund, developed in accordance with decision 3/CP.17, paragraph 17, and of the TEC, developed in accordance with decision 4/CP.17, paragraph 6 and decision 1/CP.18, paragraph 62.

<sup>&</sup>lt;sup>6</sup> Decision 4/CP.18, paragraph 2.

<sup>&</sup>lt;sup>7</sup> Decision 4/CP.18, paragraph 5.

<sup>&</sup>lt;sup>8</sup> <a href="http://unfccc.int/files/parties\_and\_observers/notifications/application/pdf/message\_to\_parties\_from\_cochars\_wpltf.pdf">http://unfccc.int/files/parties\_and\_observers/notifications/application/pdf/message\_to\_parties\_from\_cochars\_wpltf.pdf</a>

- (c) The modalities for conducting this work programme and other supporting activities.
- 8. In the "Report on the workshops of the work programme on long-term finance" (2012),<sup>9</sup> it was noted<sup>10</sup> that the COP could consider providing guidance for more structured work on climate finance between and within relevant bodies under the Convention.<sup>11</sup> This guidance could include, inter alia, the following:
  - (a) To request the TEC, in its consideration of its work plan, to assess the technology and research and development (R&D) financing needs, including options to stimulate R&D investments and deploying low-carbon technologies.

#### The need for long-term finance for the development and transfer of technologies

9. According to the report by the Chair of the Expert Group on Technology Transfer on "Recommendations on future financing options for enhancing the development, deployment, diffusion and transfer of technologies under the Convention" (2009), 12 the "(e)stimates of the financing resources currently available for technology research, development, deployment, diffusion and transfer (...) for mitigation technologies (...) are between USD 70 and 165 billion per year". 13 This report also stated that "(s)everal estimates are available of the additional financing that will be needed for research, development, demonstration, deployment and diffusion of mitigation technologies in order to stabilize levels of greenhouse gases in the atmosphere. The estimates are sensitive to the baseline and mitigation scenarios used and indicate that current financing for mitigation technologies needs to increase by USD 262-670 billion annually until 2030 (to a total of USD 332-835 billion annually)." 14 Figure 1 below shows these estimates:

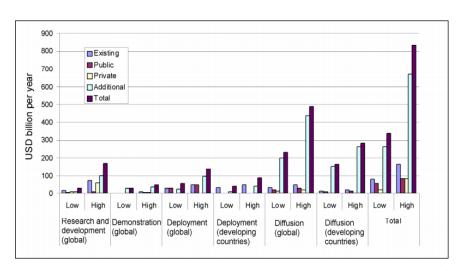


Figure 1. Estimates of annual financing needs for mitigation technologies up to 2030, by source and stage of technological maturity<sup>15</sup>

<sup>&</sup>lt;sup>9</sup> FCCC/CP/2012/3.

<sup>&</sup>lt;sup>10</sup>FCCC/CP/2012/3, paragraph 16.

<sup>&</sup>lt;sup>11</sup> Including the Standing Committee, the Adaptation Committee, the TEC, the Least Developed Countries Expert Group, and the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention.

<sup>12</sup> FCCC/SB/2009/2.

<sup>&</sup>lt;sup>13</sup> FCCC/SB/2009/2/Summary, paragraph 4.

<sup>&</sup>lt;sup>14</sup> FCCC/SB/2009/2/Summary, paragraph 5.

<sup>&</sup>lt;sup>15</sup>FCCC/SB/2009/2/Summary, page 4.

- 10. Regarding technologies for adaptation, the same report says that "(f)or technologies for adaptation, R&D is focused on tailoring the technology to the specific site and application; it therefore forms part of the project cost. Current spending on adaptation projects in developing countries is about USD 1 billion per year", however "(e)stimates of the future spending needs for adaptation range from tens of billions to hundreds of USD billion per year." The report concludes that "(d)espite the uncertain figures (...) current financing resources need to be increased significantly" have report concludes that "(d)espite the uncertain figures (...) current financing resources need to be increased significantly.
- 11. The report on "Investment and Financial Flows to Address Climate Change: An Update" (2009)<sup>19</sup> indicates, in general terms but including for technology development and transfer, that the additional amount of investment and financial flows needed in 2030 to address climate change is large compared with the funding currently available under the Convention and its Kyoto Protocol. It found that a significant share of the additional investment and financial flows for both mitigation and adaptation will be needed in developing countries.
- 12. More recently, in the "Report on the workshops of the work programme on long-term finance" (2012),<sup>20</sup> the findings and recommendations by the co-chairs of the work programme on LTF, informed by inputs and discussions during the work programme, include the following statement: "While estimates of the scale of climate financing needs varies depending upon the assumptions and methodologies used, studies presented during the work programme show that the current scale of finance does not match the level required to fully address the adaptation and mitigation needs of developing countries",<sup>21</sup> including for technology development and transfer.
- 13. The purpose of international LTF is to help implement low carbon development and climate resilient actions in developing countries. The joint mobilising of USD 100 billion per year by 2020 can provide meaningful mitigation and adaptation effort for this purpose. The collaboration between the work programme on LTF and the Technology Mechanism is important to progress this task.

## Financial needs identified by Developing Countries in the technology needs assessments

- 14. In the second synthesis report on technology needs identified by Parties (2009),<sup>22</sup> a synthesis of technology needs assessments (TNAs) revealed that economic and market barriers are the most common type of barriers to technology transfer identified by Parties.<sup>23</sup>
- 15. In the background document for the 6<sup>th</sup> meeting of the TEC "Compilation and synthesis of information contained in the second round of TNAs, with particular focus on barriers to and enabling environments for technology development and transfer"<sup>24</sup> it was noted that in relation to adaptation, for the most commonly prioritized adaptation sector, agriculture, all countries identified economic and financial barriers as barriers for technology development and transfer. Within this barrier category, the most highlighted barrier was the lack of or inadequate access to financial resources.<sup>25</sup>
- 16. In relation to mitigation, the most commonly prioritized sector was the energy sector, and the economic and financial barriers were the most commonly identified barriers. Within this barrier category, almost 90 per cent of Parties identified inappropriate

<sup>&</sup>lt;sup>16</sup> FCCC/SB/2009/2/Summary, paragraph 4.

 $<sup>^{\</sup>rm 17}$  FCCC/SB/2009/2/Summary, paragraph 6.

<sup>&</sup>lt;sup>18</sup> FCCC/SB/2009/2/Summary, paragraph 9(g).

<sup>&</sup>lt;sup>19</sup> Investment and Financial Flows To Address Climate Change: An Update, UNFCCC, March 2009.

<sup>&</sup>lt;a href="http://unfccc.int/resource/docs/2008/tp/07.pdf">http://unfccc.int/resource/docs/2008/tp/07.pdf</a>

<sup>&</sup>lt;sup>20</sup> FCCC/CP/2012/3.

<sup>&</sup>lt;sup>21</sup> FCCC/CP/2012/3, paragraph 8.

<sup>&</sup>lt;sup>22</sup> FCCC/SBSTA/2009/INF.1.

<sup>&</sup>lt;sup>23</sup>FCCC/SBSTA/2009/INF.1, page 29.

<sup>&</sup>lt;sup>24</sup> TEC/2013/6/10.

<sup>&</sup>lt;sup>25</sup> TEC/2013/6/10, paragraph 24.

financial incentives and disincentives a significant barrier and more than 80 per cent of Parties highlighted a lack of or inadequate access to financial resources.<sup>26</sup>

- 17. In its "Report on activities and performance of the Technology Executive Committee for 2012" (2012), 27 under the review of technology needs from various sources, the TEC stated that "TNAs and their syntheses are a key information source for the work of the TEC on the prioritization of activities under the Technology Mechanism, and could be a rich source of information for governments, business and other stakeholders." 28
- 18. The TEC is currently undertaking an analysis of barriers to and enabling environments for technology transfer activities based on information obtained from the second round of TNAs.<sup>29</sup> In addition this information would provide a basis for the TEC to prepare recommendations to the COP on enabling environments of relevance to the work programme on LTF.

## Key messages from the TEC to COP 18

- 19. In its "Report on activities and performance of the Technology Executive Committee for 2012" (2012),<sup>30</sup> the TEC delivered several key messages on barriers to and enabling environments for technology development and transfer, including messages related specifically to finance:<sup>31</sup>
  - (a) Activities related to the technology cycle, <sup>32</sup> policy, regulatory frameworks and financing should be considered in an integrated manner;
  - (b) Engaging the financial and business community, at both the international and the national level, at an early stage is crucial to enhance access to financing for the development and transfer of technologies;
  - (c) The Technology Mechanism and other international instruments used to promote technology transfer to developing countries should be clearly aligned with the enabling frameworks that facilitate private- and publicsector investment.
- 20. In the same report, regarding TNAs, the TEC noted that there is a need to engage financial and business communities and funding sources under and outside the Convention to facilitate the implementation of the TNA outcomes.

#### **Final considerations**

- 21. There is a wide agreement that substantial increases in financial resources are needed in order to help developing countries to limit and reduce greenhouse gas emissions, and to adapt to the impacts of climate change.
- 22. The TEC would welcome the opportunity to engage with the work programme on LTF on issues relating to barriers to and enabling environments for technology transfer and the provision of financial resources for technology development and transfer activities.
- 23. The TEC will include the work it has completed on research, development and demonstration (RD&D) of environmentally sound technologies when preparing its annual

<sup>28</sup> FCCC/SB/2012/2, paragraph 30(a).

<sup>&</sup>lt;sup>26</sup> TEC/2013/6/10, paragraph 19.

<sup>&</sup>lt;sup>27</sup> FCCC/SB/2012/2.

<sup>&</sup>lt;sup>29</sup> For this purpose, the secretariat is now preparing a third synthesis report based on TNAs from this second round which will be submitted to SBSTA 39. This analysis and the synthesis report will allow for an analysis of how barriers addressed by Parties have changed from the first round of TNAs (conducted up until 2008) to the second round of TNAs (conducted from 2011–2013).

<sup>&</sup>lt;sup>30</sup> FCCC/SB/2012/2.

<sup>&</sup>lt;sup>31</sup>FCCC/SB/2012/2, paragraph 35.

<sup>&</sup>lt;sup>32</sup>As defined in decision 1/CP.16.

report and key messages for COP 19, and will consider assessing the technology and RD&D financing needs,<sup>33</sup> including options to stimulate RD&D investments and to deploy low-carbon technologies, in the preparation of its workplan for 2014–2015.

- 24. In providing guidance to Parties on addressing financial, economic and market barriers to technology transfer activities, and in order to improve and facilitate access to the financial resources, the TEC acknowledges the COP decisions in relation to establishing close collaboration and linkages with the work programme on LTF, the Standing Committee on Finance, the Adaptation Fund, the Global Environment Facility and the Green Climate Fund, and recognizes the importance of such collaboration.
- 25. The TEC is of the view that these bodies and instruments of the financial mechanism of the Convention should cooperate and coordinate actions with other thematic bodies under the Convention, including those that constitute the Technology Mechanism, the TEC and the CTCN.
- 26. The TEC would like to emphasize that activities related to the development and transfer of environmentally sound technologies encompass many organizations and entities inside and outside of the Convention, including the financial and business community. Therefore, in accordance with its mandate, the TEC recognises the importance of promoting the development and transfer of technologies among those organizations and entities and, in particular, that more work is required to attract, mobilise and scale-up private investment.

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<sup>&</sup>lt;sup>33</sup> The IEA "Tracking Clean Energy Progress 2013" states that accelerating government RD&D support is vital to bring promising clean energy technologies to the market. It calls for a required increase of 3-6 times in RD&D investments.